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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,746	12/28/2001	Guy L. Steele JR.	06502.0371-00000	4057

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Washington, DC 20005-3315

EXAMINER

MAI, TAN V

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/035,746

Applicant(s)

STEELE, GUY L.

Examiner

Tan V. Mai

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-28 is/are allowed.
- 6) ☒ Claim(s) 29-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/4 & 11/23/04</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 29, 31, 59 and 60 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11-12, 14, 17-18 and 20, respectively, of copending Application No. 10/035,586. Although the conflicting claims are not identical, they are not patentably distinct from each other because the "**first floating point operand and a second floating point operand**" [of instant application] is same as the "**plurality of floating point operands**" [of Application No. 10/035,586] when "plurality" equals 2. It is also noted that the preambles recite different features, i.e., max/min vs. comparing; however, the bodies only recite comparing features.

Claims 29, 31-34, 59 and 60 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over

claims 15, 17-20, 26 and 28, respectively of copending Application No. 10/028,375.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the bodies only recite comparing features.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 29-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Orup.

Rejection grounds continue to be those set forth in the previous office action (Paper No. dated 9/22/04, paragraph 6).

4. Claims 29-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al (Applicant's admission Prior Art).

Rejection grounds continue to be those set forth in the previous office action (Paper No. dated 9/22/04, paragraph 7).

5. Claims 29-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch et al (Applicant's admission Prior Art).

Rejection grounds continue to be those set forth in the previous office action (Paper No. dated 9/22/04, paragraph 8).

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6. Applicant's arguments filed on 12/16/04 have been fully considered but they are not persuasive.

Applicant, in his remarks, argues that:

- (1). "[r]egarding Claim 29, the Examiner stated that Orup does not specifically disclose determining a format of the first/second floating point operand based upon floating point status information encoded within the first/second floating point operand. (See Office Action, page 4, lines 22-23.) In addition, the Examiner merely states that this missing element would be obvious to a person having ordinary skill in the art. (See Office Action, page 5, lines 5-9.) As a result, Applicant respectfully asserts that the Examiner has failed to make a prima facie case of obviousness. In order to make a prima facie case of obviousness, the Examiner must set forth prior art which teaches or suggests every claim limitation";
- (2). "[r]egarding Claim 29, the Examiner stated that Hwang does not specifically disclose determining a format of the first/second floating point operand based upon floating point status information encoded within the first/second floating point operand. (See Office Action, page 6, lines 8-10.) In addition, the Examiner merely states that this missing element would be obvious to a person having ordinary skill in the art. (See Office Action, page 6, lines 14-17.) As a result, Applicant respectfully asserts that the Examiner has failed to make a prima facie case of obviousness. In order to make a prima facie case of obviousness, the Examiner must set forth prior art which teaches or suggests every claim limitation"; and
- (3). "[r]egarding Claim 29, the Examiner stated that Lynch does not specifically disclose determining a format of the first/second floating point operand based upon floating point status information encoded within the first/second floating point operand. (See Office Action, page 8, lines 1-2.) In addition, the Examiner merely states that this missing element would be obvious to a person having ordinary skill in the art. (See Office Action, page 8, lines 9-12.) As a result, Applicant respectfully asserts that the Examiner has failed to make a prima facie case of obviousness. In order to make a prima facie case of obviousness, the Examiner must set forth prior art which teaches or suggests every claim limitation" (emphasis added).

With respect to the arguments, the examiner carefully reviews all the applied references and the claimed invention.

First, in the previous office action (Paper No. dated 9/22/04, paragraph 6), it is stated "[h]owever, Orup does disclose "FPU core 94 may use the **tag value** ... Types of special floating point numbers include zero, + infinity, -infinity, and NaNs. By including one bit for each type of special floating point number, FPU core 94 can determine which type of special floating point number the operand represents with minimal decoding"

(col. 16, first complete paragraph)" (page 5, lines 1-5). The statement does discuss the equivalent function(s) of "missing element". Therefore, the rejection is still proper.

Second, in the previous office action (Paper No. dated 9/22/04, paragraph 7), it is stated "[h]owever, Huang et al do disclose X and Y operand registers each includes a special operand indicator which is stored a special operand of a predetermine set of special operands. Therefore, the Huang et al's feature is equivalent to the claimed 'determining a format...'" (page 6, lines 11-14). The statement does discuss the equivalent function(s) of "missing element". Therefore, the rejection is still proper.

Third, in the previous office action (Paper No. dated 9/22/04, paragraph 8), it is stated "[f]irst, Lynch et al do disclose FPU (94) performs "floating point **operation**". Therefore, it would have been obvious to a person having ordinary skill in the art the FPU (94) is capable of providing 'one of the **maximum** and the **minimum** of a first floating point operand and a second floating point operand' as claimed. Second, Lynch et al disclose 'appends a tag value to each floating point number'. Therefore, the combination of the stored floating point number with a tag value is considered the claimed 'floating point status information encoded **within** the ... floating point operand'" (page 8, lines 2-9). The statement does discuss the equivalent function(s) of "missing element". Therefore, the rejection is still proper.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is:

Official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.


Tan V. Mai
Primary Examiner